REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicants thank the Examiner for carefully considering this application.

Disposition of Claims

Claims 1-26 are currently pending in this application. Claims 1, 12, 15, 17, 18, 25, and 26 are independent. The remaining claims depend, directly or indirectly, from claims 1, 12, 15, and 18.

Note on Co-pending Applications

Applicant notes that the present application may be related to one or more of the co-pending applications listed in the attached Appendix of Co-pending Applications. Applicant notes that while some of the listed applications were filed after the referenced application and are distinct in subject matter from the present application, out of abundance of caution, Applicant hereby notifies the Examiner of the potentially related co-pending applications listed in the attached Appendix of Co-pending Applications.

Drawings

Applicants respectfully request the Examiner to indicate whether the drawings filed on April 21, 2004, are accepted.

Claim Amendments

Independent claims 1, 15, 17, 18, 25, and 26 have been amended to recite a first data block and a second data block, both of which are referenced by an indirect block that stores data block locations and checksums for both the first data block and the second data block.

Dependent claims have been amended to comply with corresponding amended independent claims. Support for these amendments may be found, for example, in Figure 3 and the accompanying text of the Specification. No new subject matter is added by way of these amendments. Further, Applicants assert that no new search or consideration is required by the amended claims because independent claim 12, which the Examiner previously searched, originally included the subject matter of amended independent claims 1, 15, 17, 18, 25, and 26.

Rejections under 35 U.S.C. § 102

Claims 1-26 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Publication No. 2002/0161972 ("Talagala"). To the extent that this rejection may still apply to the amended claims, this rejection is respectfully traversed.

The invention, as recited in the amended claims, is directed towards a file system that uses a hierarchical tree structure to reference data blocks in a storage pool. The independent claims of the invention recite, in part, an indirect block that includes block pointers that reference a first and a second data block (*i.e.,* two child blocks) (*see* Specification, Figure 3 and accompanying text).

Turning to the rejection of the claims, for anticipation under 35 U.S.C. § 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present. *See* MPEP § 2131. Applicants respectfully assert that Talagala fails to disclose the use of a hierarchical tree structure in which an indirect block references multiple data blocks as recited in the amended independent claims.

Specifically, the Examiner cites paragraphs [0013], [0052]-[0053], [0060], [0065], and Figures 6A-6C of Talagala as disclosing the aforementioned limitation of the amended independent claims (*see* Office Action mailed May 23, 2007, page 12; note that independent

claim 12 includes all the limitations now recited in the remaining independent claims). However, the cited portion of Talagala describes a circular linklist. A circular linklist is a data structure where each segment references the next segment in the linklist except for the last segment, which holds a reference to the first segment in the linklist (*see* Talagala, figures 5A, 5B, 5C, 6A, 6B, 6C; paragraphs [0056], [0057]). Further, no segment in the circular linklist is able to hold references to multiple child segments (*i.e.,* a first data block and a second data block) as is possible in the hierarchical tree structure of the claimed invention. Further, Talagala fails to disclose that a data block checksum for *each of* the first data block and the second data block is stored in an indirect block that references the two data blocks. No matter how broadly the Examiner reads the phrase hierarchical tree structure, it cannot be reasonably said that the circular linklist used in Talagala discloses the hierarchical tree structure in which one indirect block references two distinct data blocks, as recited in the amended claims.

Further, with respect to dependent claims 4, 8-10, and 22-24, Talagala fails to disclose the use of a metaslab in a file system. The Examiner references paragraph [0043] and [0065] and Figures 6C, 7B, and 8B of Talagala in support the assertion that parity groups are analogous to metaslabs (*see* Office Action mailed May 23, 2007, pages 4-6). Applicants respectfully disagree.

At the outset, Applicants note that while the Examiner is required to examine claims using the "broadest interpretation of the ... claim language" (*See* MPEP § 2111), a proper reading of a claim depends on "giving each term in the claim its broadest *reasonable* construction *consistent with the specification*...." *See Phillips v. AWH Corp* (emphasis added).

A metaslab is defined in the present application as a contiguous region of memory, *i.e.,* memory in which data may be stored (*see* Specification, paragraphs [0032]-[0033]). Thus, a metaslab is an allocated region in memory (*see* Specification, paragraph [0031], [0033]). In

contrast, parity groups correspond to generated data (*i.e.,* a parity group is formed using data that is already written in memory (*see* Talagala, paragraph [0007])). Clearly, data, which can be stored in memory, is not equivalent to memory (or a portion thereof). Accordingly, the parity groups in Talagala are not equivalent to metaslabs as recited in the dependent claims.

In view of the above, it is clear that Talagala fails to disclose each and every limitation of the claimed invention. Thus, the amended independent claims are patentable over Talagala. Further, dependent claims are patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicants believe this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591 (Reference Number 03226/390001).

Dated: August 1, 2007   Respectfully submitted,

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Attachment (Appendix of Co-Pending Applications for Application Serial No. 10/828,573)

Appendix of Co-Pending Applications for Application Serial No. 10/828,573

Application Serial No.	Title	Filing Date
10/853,915	Automatic Conversion of All-Zero Data Storage Blocks into File Holes	May 26, 2004
10/828,677	Method and Apparatus for Dynamic Striping	April 21, 2004
10/828,715	Method and Apparatus for Vectored Block-Level Checksum for File System Data Integrity	April 21, 2004
10/853,874	Method and Apparatus for Identifying Tempering of Data in a File System	May 26, 2004
10/853,837	Method and System for Detecting and Correcting Data Errors Using checksums and Replication	May 26, 2004
10/853,870	Method and System for Detecting and Correcting Data Errors Using Data Permutations	May 26, 2004
10/853,868	Method and Apparatus for Compressing Data in a File System	May 26, 2004
10/919,878	Gang Blocks	August 17, 2004
10/919,886	Method and Apparatus for Enabling Adaptive Endianness	August 17, 2004
11/434,296	Method and System for Data Replication	May 15, 2006
11/406,956	Multiple Replication Levels with Pooled Devices	April 19, 2006
11/406,850	Method and System for Per-File and Per-Block Replication	April 19, 2006
11/407,773	Method and System for Dirty Time Logging	April 19, 2006
11/407,744	Method and System for Dirty Time Log Directed Resilvering	April 19, 2006
11/407,719	Method and System for Metadata-Based Resilvering	April 19, 2006

Application Serial No.	Title	Filing Date
11/409,427	Method and System for Pruned Resilvering Using a Dirty Time Log	April 19, 2006
11/406,756	Method and System Using Checksums to Repair Data	April 19, 2006
11/406,578	Method and System for Repairing Partially Damaged Blocks	April 19, 2006
11/406,592	Method and System for Storing a Sparse File Using Fill Counts	April 19, 2006
11/408,134	Method and System for Object Allocation Using Fill Counts	April 20, 2006
11/406,590	Ditto Blocks	April 19, 2006
11/406,957	Method and System for Adaptive Metadata Replication	April 19, 2006
11/409,435	Method and System for Block Reallocation	April 19, 2006
11/407,637	Method and System for Using a Block Allocation Policy	April 20, 2006
11/432,067	Block-Based Incremental Backup	May 11, 2006
11/513,800	Unlimited File System Snapshots and Clones	August 31, 2006
11/489,936	Reflecting Bandwidth and Priority in Network Attached Storage I/O	July 20, 2006
11/591,234	Method and System for Power-Managing Storage Devices in a Storage Pool	October 31, 2006
11/591,425	Method and System for Priority-Based Allocation in a Storage Pool	October 31, 2006
11/591,422	Method and System for Reallocating Blocks in a Storage Pool	October 31, 2006